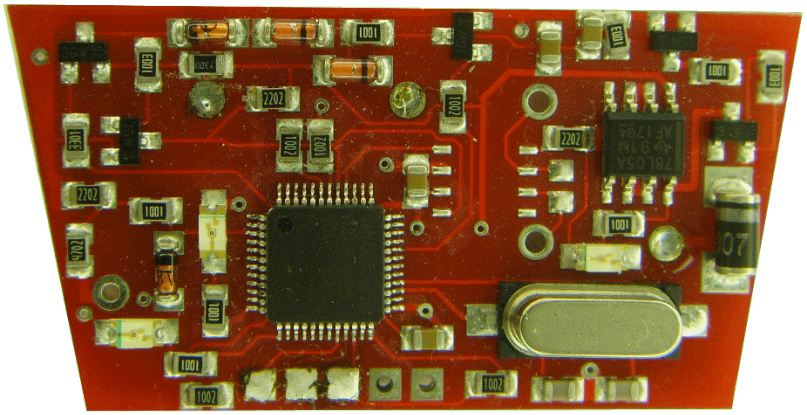
User Manual Happylightshow
Software Version 2.21

for Astra H / Zafira B

HAPPYLIGHTSHOW.DE



IbS Industrieberatung Schön

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1.Introduction

The HAPPYLIGHTSHOW is a additional electronical device, that communicates through the on-board CAN-Bus system.
Therefore additional new functions are possible.

The HAPPYLIGHTSHOW is very easy to install, because it‘s only being put on the diagnostic link connector (DLC).

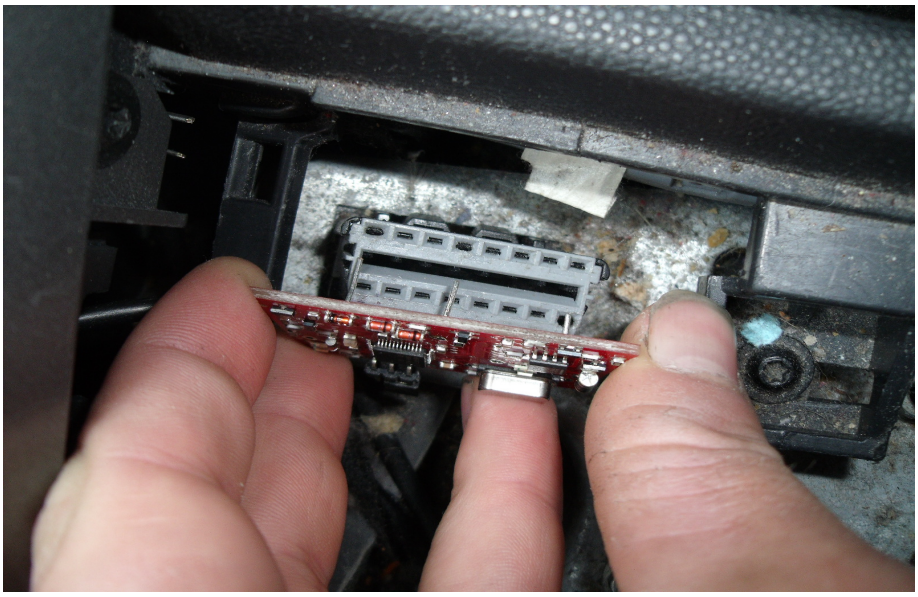
-> No wiring or soldering necessary

2.1 Einbau Astra H

mounting place:
diagnostic link connector (DLC) underneath the cover of the handbrake

procedure:

Holt the device a little bit angular and put the two pins on top inside Pin 1 and 4 of the DLC.
After that, put the single Pin inside Pin 16 of the DLC (see figure)

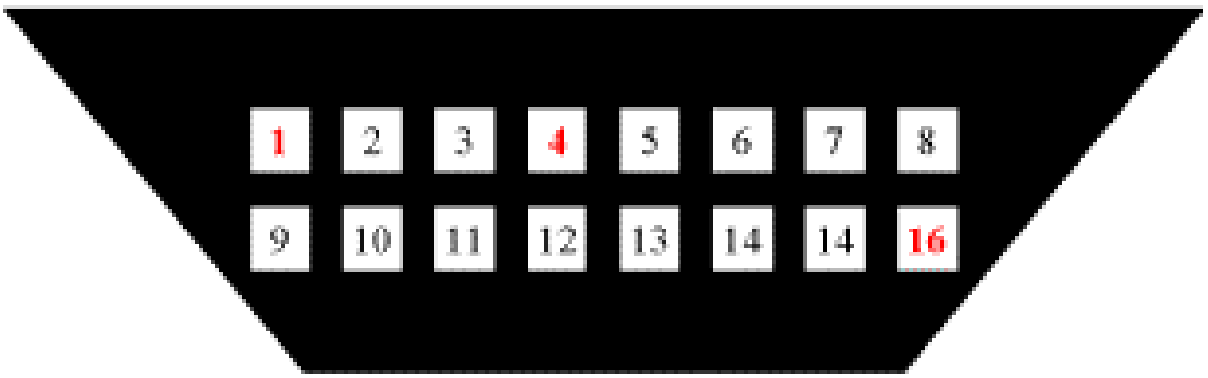


2.2 Einbau Zafira B

Mounting place:
Diagnostic link connector (DLC) behind ashtray

procedure:

Put the **black** wire into Pin 4 of the DLC,
Then put te **red** wire into Pin 16,
Finally put in the **pink** wire into Pin1 of the DLC.
(see figure)



2.3 functional test

Activate the ignition.

If the installation was sucessful the Leds on the HAPPYLIGHTSHOW will work like this:

Green Led lights up continuous
Red Led toggels every second

→ Installation sucessful, go on with setup procedure

3 Setup Parameters

3.1 Activation setup modus

Requirements:
Ignition on, **Engine off**. **Clutch** must **not** be pushed and **Lightswitch off**

Procedure:
Push Brake, FlashToPass and **TurnLight Left** at the same time.

Advice:
Best way to do it is: PushBrake and FlashToPass and then add TurnLightLeft.
The odometer is now in the parameter menu.

3.2 Change parameters Adjustment

The value of the digits will be count upwards by pushing the **brake pedal**.
Changing from digit to digit is made with **clutch pedal**.

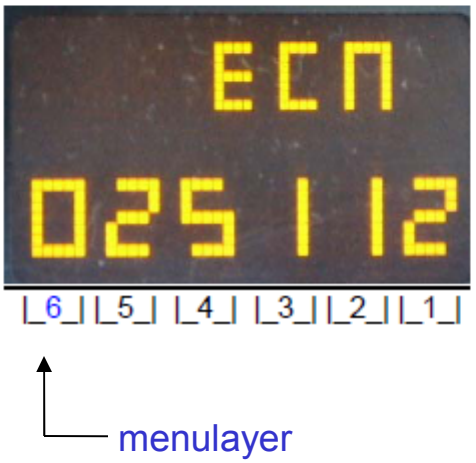
Cars with *automatic* Transmission have the possibility to change between the digits by using the **parking light switch** (on/off.)

3.3 Save Adjustments & Resetting Trip Computer

To save the adjustments you have to push turn switch **right** once.
Now “333333“ should be shown inside the odometer

The Setup procedure is now finished.

3.4 Parameters



Digit 6:
0 = menulayer 0
1 = menulayer 1
2 = menulayer 2
3 = menulayer 3

Digit 0.1: *OPC*
0 = OPC Scan off
1 = OPC Scan on

Digit 0.2: *Coolant temperature / Trip Computer*
0 = off
1 = with rear window heater switch* and warning over 105 °C
2 = until Engine reaches 75 °C and warning over 105 °C
3 = with Centrallocking and warning over 105 °C
4 = until Engine reaches 75 °C **OR** rear window heater* and warning over 105 °C
5 = until Engine reaches 90 °C **OR** rear window heater* and warning over 105 °C
6 = Trip Computer 1*
7 = Trip Computer 2
8 = till Engine reaches 75°C, then vehicle speed

*only with automatic climate control

Digit 0.3: *WTTC lights rear* (with REC)
0 = off
1 = Reverse Light + License plate
2 = Taillight + License plate
3 = Reverse Light + Taillight + License plate
4 = Red Taillights without foglamp + License plate (Caravan)
5 = Turn Lights + License plate

Digit 0.4: *WTTC lights front* (with REC)
0 = off
1 = Low Beam + Parking light
2 = Low Beam + Parking light + Repeater
3 = Fog lamp + Parking light
4 = Fog lamp + Parking light + Repeater
5 = Parking light
6 = Low Beam + Fog lamp + Parking light + Repeater
7 = Turn Lights
8 = High Beam + Parking light + Fog lamp + Repeater

3.Setup Parameters

Digit 0.5: *WTTC Function Time*
Number multiplied by 10 seconds (e.g. 3 = 30 seconds)

Digit 1.1 *WTTC Activation*
0 = WTTC off
1 = WTTC1 (with lightsensor) on
2 = WTTC1 (without lightsensor) on
3 = WTTC2 (with lightsensor) on
4 = WTTC2 (without lightsensor) on
5 = with single push of the key on
6 = with double push of the key on

Digit 1.2: *Thief Protection simulation*
0 = Simulation off (Happylightshow power off after 10 minutes)
1 = Simulation on

Digit 1.3: *daytime running light*
0 = DRL off
1 = DRL with foglights on
2 = DRL with parkinglight on

Digit 1.4: *Speedlock*
0 = Speedlock off
1 = Speedlock 1 on
2 = Speedlock 2 on

Digit 1.5: *Chirp*
0 = Chirpfunction off
1 = Chirpfunction short on
2 = Chirpfunction long on

Digit 2.1: *hazardlight function*
0 = hazardlightfunction off
1 = hazardlightfunction on

Digit 2.2: *Distance Signal – for internal Navi*
0 = Distance impulses off
1 = Distance impulses on

Digit 2.3: *Thief Protection simulation time*
0 = 20 h
1 = 40 h
2 = 60 h
3 = 80 h

Digit 2.4: *REC equipped*
0 = no
1 = yes

Digit 2.5 *WTTC lights (without REC)*
0 = off
1 = Low Beam, Taillight and License Plate
2 = High Beam, Taillight and License Plate

4.Functional Description

Lightshow:

Requirements:Ignition on, engine off

Procedure:

Push Brake, FlashToPass and **TurnLight Right** at the same time.

Advice:

Best way to do it is: PushBrake and FlashToPass and then add TurnLightLeft.

-

> highbeam and turnlight telltales begin to flash

To switch between lightsamples push brake pedal, the speedometer

Shows the sample (180km/h = Sample 18)

To switch betwenn the variations use parklightswitch on/off,

The tachometer shows variation (2000 rpm = variation 2)

Variation 1: lights changing clockwise/anticlockwise
Variation 2: lights clockwise
Variation 3: lights anticlockwise

Hint:

Digit 0.3 and Digit 0.4 are only relevant, if Digit 2.4 is 1

*(for Vehicles **with** REC)*

Digit 2.5 is only relevant, if Digit 2.4 is 0

*(for Vehicles **without** REC)*

4.Functional Description

OPC-Scan:

Speedometer and tachometer go to limit and back when activating the ignition

Speedlock 1:

Car locks automatically if faster than 20km/h

Unlocks manually.

Speedlock 2:

Car locks automatically if faster than 20km/h

Unlocks automatically if the engine is turned off.

Trip Computer:

Shows following informations inside the odometer:

Engine Coolant Temperature (first digit = 0)

Actual Consumption on 100km (first digit = 1)

Average Consumption on 100km (first digit = 2)

True Speed (first digit = 3)

To switch between the values press rear window heater or internal light switch twice.

To reset the average consumption setup the devices once.

4.Functional Description

Thief Protection Simulation:

The Led inside the central door lock button flashes, if car is locked

(its looks like a regular system)

WTTC Function:

The driving lights light up, if car gets locked/unlocked.

Details in attachment.

4.Functional Description

Daytime Running Light:

Fog (only with REC) or Parking Lights are activated meanwhile the lightswitch is off, or the lightsensor recognizes daylight.

Chirp function :

Vehicle honks two times (short/long) when opening the car and once when closing the car.

Hazardlight function:
Hazardlight will flash while the hatchback is open

Distance Signal Function:

Distance signal for a internal Navigation System.

Particel Filter Regeneration Display:

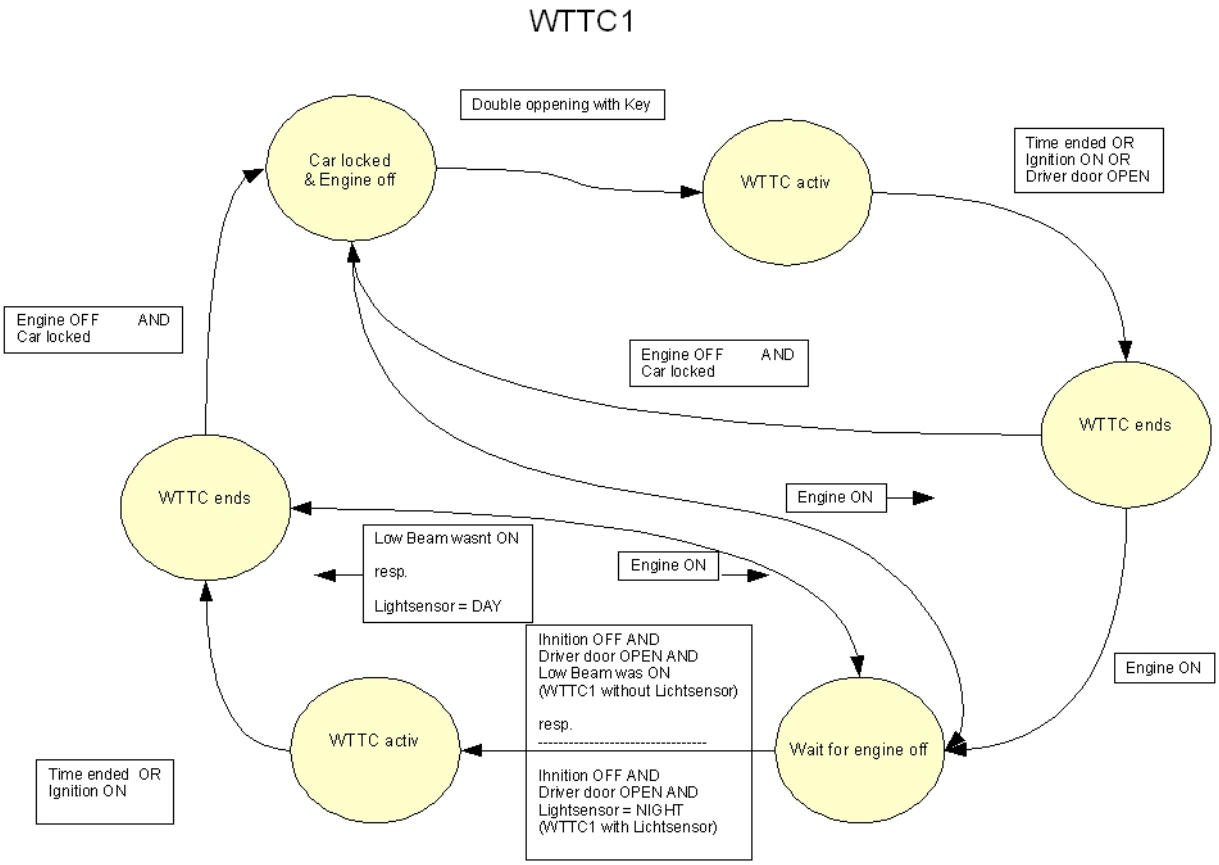
When the vehicle is cleaning the particel filter, you will see the following message in your odometer. (df = DieselFilter)

5. Legal meaning

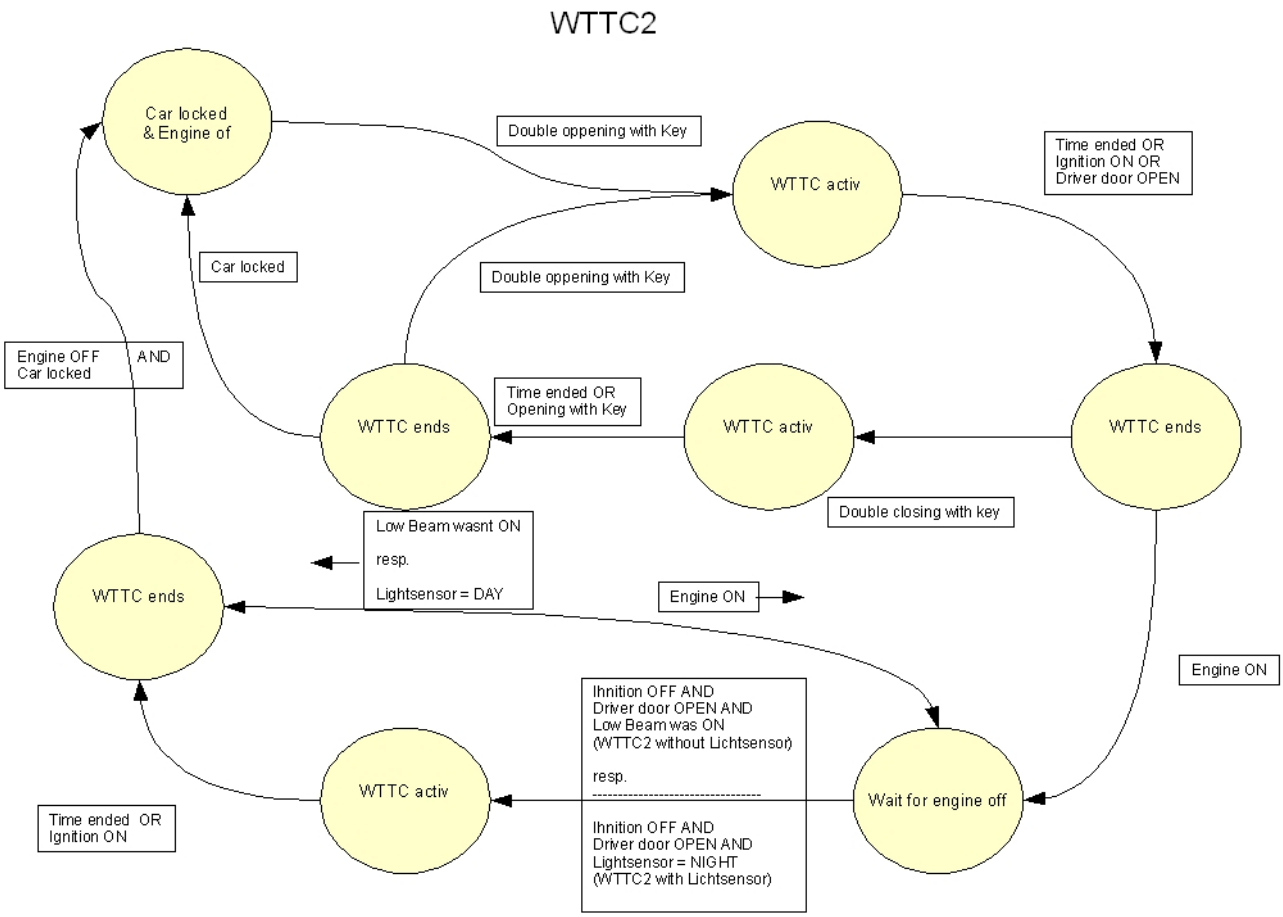
The devices has no general type approval,
thus it is not allowed to use it within the laws of road traffic.

By noncompliance the user will be responsible for any loss.

6. Attachment



6. Attachment


WTTC2
Car locked & Engine of
Double oppening with Key
WTTC activ
Time ended OR Ignition ON OR Driver door OPEN
Car locked
Double oppening with Key
Engine OFF AND Car locked
WTTC ends
Time ended OR Opening with Key
WTTC activ
WTTC ends
Double closing with key
Low Beam wasnt ON
resp.
Lightsensor = DAY
WTTC ends
Engine ON
Engine ON
Ihnition OFF AND Driver door OPEN AND Low Beam was ON (WTTC2 without Lichtsensor)
resp.
Ihnition OFF AND Driver door OPEN AND Lightsensor = NIGHT (WTTC2 with Lichtsensor)
WTTC activ
Wait for engine off
Time ended OR Ignition ON